

COVID-19 AND SANITATION

May 2020



HYDRITE CHEMICAL CO.

Providing Creative Solutions



REFERENCES FOR THIS PRESENTATION

SARS-CoV-2 is a novel coronavirus

Information is evolving daily

Information in this presentation is based on Centers for Disease Control and Prevention (CDC), World Health Organization (WHO) and Environmental Protection Agency (EPA) guidance enhanced with Hydrite expertise as of May 2020.

Please review CDC, WHO, EPA and/ or your local health authority for the most recent information.

[CDC Coronavirus Information](#)

[FDA Coronavirus Information](#)

[WHO Coronavirus Information](#)

[Directory of Local Health Departments](#)



BACKGROUND: SARS-COV-2



SARS-COV-2 (VIRUS) CAUSES COVID-19 (DISEASE)



Virus is not living, a host (animal/human) is needed to replicate.

SARS-Cov-2 has not been previously identified in humans.

Transmitted between animal and people.

May spread by respiratory droplets from an infected person through:

- Air by coughing and sneezing
- Close personal contact
- Touching an object or surface with virus on it, then touching your mouth, nose or eyes before washing your hands

Enters through eyes, nose and mouth

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>



PEOPLE SAFETY VS FOOD SAFETY

Currently there is no evidence of food, food containers, or food packaging being associated with transmission of COVID-19.

- Like other viruses, it is possible that the virus that causes COVID-19 can survive on surfaces or objects.

It is always important to follow the 4 key steps of food safety—clean, separate, cook, and chill.

Prevent spread through:

- Social distancing
- Respiratory hygiene
- Handwashing

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Ftransmission.html
<https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/coronavirus-disease-2019-covid-19-frequently-asked-questions#food>



COVID-19 ON SURFACES

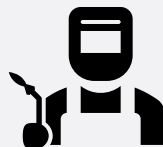
How long can it be viable on surfaces?



Wood for 4 days



Plastics for 3 days



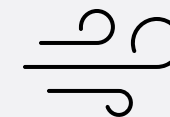
Stainless steel
for 2-3 days



Cardboard
for 24 hours



Copper for 4 hours



Detectable in
air for 3 hours

<https://www.nejm.org/doi/full/10.1056/NEJMc2004973>
[https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247\(20\)30003-3/fulltext](https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(20)30003-3/fulltext)



SANITIZER VS. DISINFECTANT



DEFINITION - SANITIZERS



- To reduce bacterial contamination to levels judged to be safe as determined by public health authorities.
- The claim “sanitizer” is regulated by the EPA and requires strict laboratory tests. A compound must pass the “Sanitizer Efficacy Test”.
- A **Food Contact** sanitizer must kill **99.999% or a 5 log reduction** of 75 million to 125 million nonpathogenic *Escherichia coli* (Gram negative) and *Staphylococcus aureus* (Gram positive) bacteria in 30 seconds at 68°F.
- If there are **1,000,000 bacteria, then only 10 can remain after 30 seconds.**

DOES NOT DISINFECT OR STERILIZE



DEFINITION- DISINFECTANT



- A chemical substance that kills a wider range of microorganisms including bacteria, fungi and viruses.
- Disinfectants remove 99.9999% or 6 logs of specific microorganisms in 10 minutes.
- In general, disinfectant levels are not used on food contact surfaces or people.
- If used on food contact surface, a rinse must be conducted post disinfectant process.
- Generally needs higher concentration and longer contact time.**
- Check the sanitizer label for specific use instructions for disinfectant application.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EP LIST: N

Product with Emerging Viral Pathogens and Human Coronavirus Claims for Use Against SARS-CoV-2

United States Environmental Protection Agency (EPA) List N meets criteria for use against SARS-CoV-2, the virus that causes COVID-19

List contains products effective against SARS-CoV-2 virus causing COVID-19

Products have not been tested against SARS-CoV-2 but have demonstrated effectiveness based on:

- Efficacy against another human coronavirus similar to SARS-CoV-2
- Having emerging viral pathogen claim
- Efficacy against harder-to-kill virus

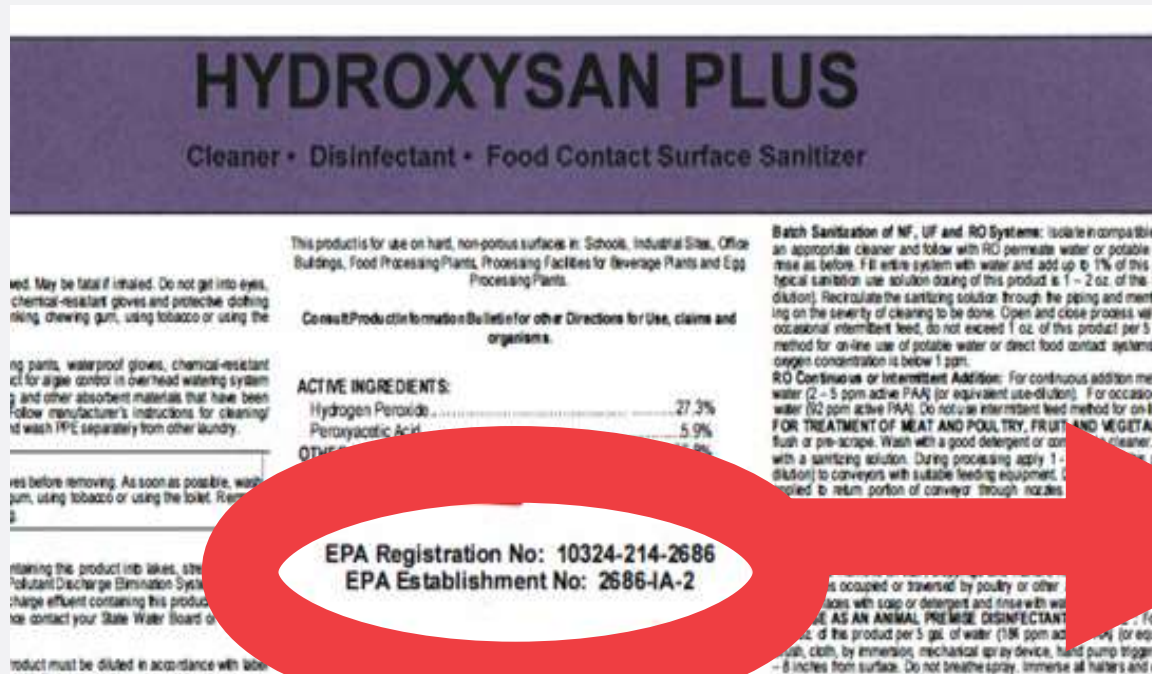
List is updating continuously

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

VERIFICATION PRODUCT IS ON LIST N

EPA registration number on the product label may be on the list but sold under a different brand name.

Find EPA Registration Number on the product label



Locate EPA Registration Number on List N

Note: Inclusion on this list does not constitute an endorsement by EPA. Additional disinfectants may meet the criteria for use against SARS-CoV-2. EPA will update this list with additional products as needed.

List N was last updated on May 7, 2020.

EPA Registration Number

Other Search Options **Clear**

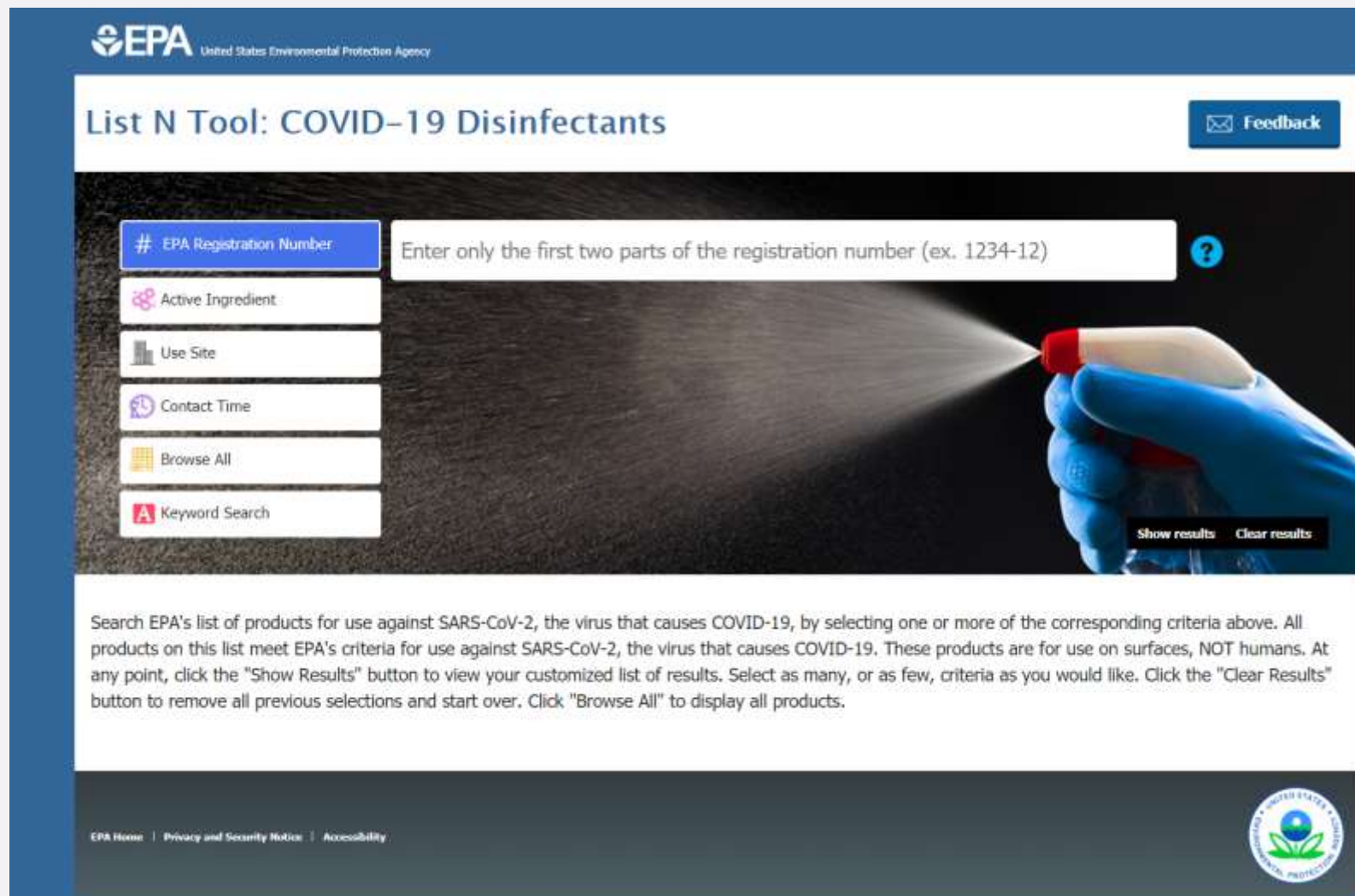
Show entries

List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2

EPA Registration Number	Active Ingredient(s)	Product Name	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)
10324-214	Hydrogen peroxide; Peroxyacetic acid	Maguard 5626	Human coronavirus	10

NEW TOOL FOR LIST N FROM EPA

US EPA List N is based on local regulatory requirements, products may not have the same claims worldwide

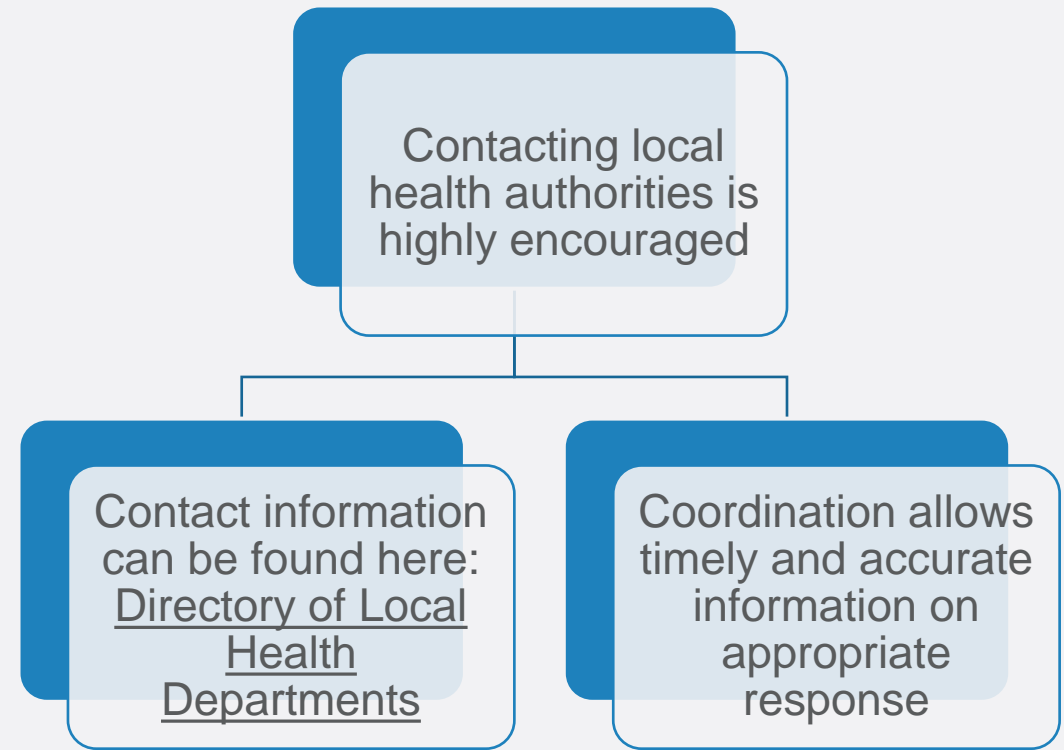


The screenshot shows the EPA List N Tool interface for COVID-19 Disinfectants. At the top left is the EPA logo and the text "United States Environmental Protection Agency". The main title is "List N Tool: COVID-19 Disinfectants" with a "Feedback" button on the right. Below the title is a search area with a list of criteria on the left and a search input field on the right. The criteria list includes: "# EPA Registration Number" (highlighted in blue), "Active Ingredient", "Use Site", "Contact Time", "Browse All", and "Keyword Search". The search input field contains the text "Enter only the first two parts of the registration number (ex. 1234-12)" and a help icon. Below the search area is a large image of a hand in a blue glove holding a spray bottle. At the bottom of the image are "Show results" and "Clear results" buttons. Below the image is a paragraph of instructions: "Search EPA's list of products for use against SARS-CoV-2, the virus that causes COVID-19, by selecting one or more of the corresponding criteria above. All products on this list meet EPA's criteria for use against SARS-CoV-2, the virus that causes COVID-19. These products are for use on surfaces, NOT humans. At any point, click the 'Show Results' button to view your customized list of results. Select as many, or as few, criteria as you would like. Click the 'Clear Results' button to remove all previous selections and start over. Click 'Browse All' to display all products." At the bottom of the page are links for "EPA Home", "Privacy and Security Notice", and "Accessibility", along with the EPA seal logo.

SANITATION CONSIDERATIONS DURING PANDEMIC



IF AN EMPLOYEE TEST POSITIVE FOR SARS-COV-2



PRIOR TO DEVELOPMENT OF SANITATION PLAN DURING PANDEMIC



RISK ASSESSMENT

Evaluate risk of processing plant

Prior to development and implementation of any increased sanitation plan

- Perform a risk assessment of entire processing facility including following items:
 - Current sanitation and Good Manufacturing Practices (GMP) procedures for both processing area and common areas
 - Local outbreaks in geographic area
 - Outbreak in facility
 - Employee training records for infection control, Personal Protective Equipment (PPE) use and sanitation procedures
 - Current supply level and lead times for sanitation supplies and PPE

List is not all inclusive for items to be assessed in processing plant



RISK ASSESSMENT

Based on the outcome, additional sanitation procedures may need to be implemented at an increased frequency

Sanitation product selection may need additional consideration

Resource availability may be taken into consideration for development and implementation of procedures

GMPs are regulation, must be followed to be in compliance



CLEANING AND DISINFECTING: PLAN, IMPLEMENT, MAINTAIN/ REVISE



CDC GUIDANCE FOR CLEANING AND DISINFECTING

Public spaces, workplaces, businesses, schools and homes

Plan

1. Develop a plan
 - What
 - How
 - Resources

Implement

2. Implement
 - Clean visibly dirty surfaces
 - Use the right product
 - Always follow the label

Maintain/ Revise

3. Maintain and Revise
 - Continue routine cleaning and disinfection
 - Maintain safe practice
 - Continue practices that reduce the potential for exposure



PLAN



PLAN

Determine what needs to be cleaned, sanitized and/or disinfected



What:



Determine what needs to be cleaned; surfaces not frequently touched do not need additional disinfection



Has the area been unoccupied for 7 days?

If the area has been unoccupied for 7 days or more, may only need normal routine cleaning to reopen.



Hard non-porous surfaces frequently touched may need routine disinfection.



Consult EPA List N for products



Common areas or frequently touched surfaces may need additional cleaning, sanitizing and/or disinfection



INCREASED SANITATION EFFORTS MAY BE NECESSARY

Common areas

Hallway

Entrances

Lobbies

Breakrooms

Locker rooms

High-touch surfaces

Stainless steel tabletops

Water hoses

Door handles

Step ladder rails

Garbage can and framework

Light switches

Tape guns

Outside of hand sanitizers

<https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/frequently-asked-questions/#food-processing-facilities-cleaning-procedure>



IN PROCESSING AREA

Sanitation

Based on risk
(Food Safety Plan, HACCP,
coordination w/ local health
department)

Routine Sanitation
continues

Follow Master Sanitation
Schedule

Use chemicals already in
use

Follow Current Good
Manufacturing Practices
(cGMP)

Disinfection of food contact
surfaces is not necessary,
but will be based on
facilities' risk assessment

Depending on risk (e.g.
outbreak in area, outbreak
in facility) may need to
increase sanitation
procedures in processing
area and/or common areas



COMMON AREAS AND FREQUENTLY TOUCHED SURFACES

Increased sanitation efforts may be necessary

Common areas (lobbies, hallways, locker rooms, break rooms) and frequently touched surfaces (non-food contact) may be subject to increased sanitation

- Goal is to prevent the spread
- Clean and disinfect hard surfaces and high-touch objects with approved disinfectants
- Frequency may need to be increased from routine sanitation
- Disinfection procedure may need to be implemented if positive COVID-19 personnel or higher risk (e.g. outbreak in area)



PLAN

How will surfaces/ areas be cleaned, sanitized and/ or disinfected

Type of surface and how frequently it is touched. Prioritize disinfecting frequently touched surfaces.

Hard non-porous surfaces frequently touched may need routine disinfection.

- Consult EPA List N for products

Soft or porous material are generally not as easy to disinfect.

- EPA List N has limited products approved for this use

Soft or porous material not frequently touched should only be cleaned or laundered, following the direction on item's label, using the warmest water setting.



COMMON AREA SANITATION STANDARD OPERATING PROCEDURE

Contact Hydrite Representative for example SSOP

1. If an employee has tested positive for COVID-19, areas used by the employee should be closed off, if possible, for at least 3 hours or up to 24 hours before beginning cleaning and disinfection process in accordance with CDC recommendations.
2. Remove debris: Including food products from the area.
3. Wash step: Use cleaning solution per label recommendations and clean surfaces.
4. Rinse: Until surfaces are visually clean.
5. Sanitizing/ Disinfecting: Use according to label instructions.
6. Documentation: concentrations, contact times, products
7. Verification: Visually clean minimum requirement, testing per facility recommendation.



PLAN

Resources: People, PPE, Chemicals, Time

Ideally, dedicated personnel will be used for sanitation process

- Third party personnel may be an option, but current timelines are extended if not already scheduled

Keep in mind availability of Personal Protective Equipment (PPE)

- Proper PPE must be donned when using/applying chemicals
- Comply with product label recommendations for PPE
- Resources for PPE (e.g. masks) may be limited, prioritize use

Certain chemicals may have limited availability

- Consult EPA List N for substitution or contact Hydrite representative

Contact time on label must be met to ensure disinfection

- Additional time may be necessary for disinfection



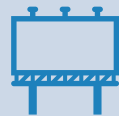
IMPLEMENT



IMPLEMENT



Clean visibly dirty surfaces with cleaner prior to disinfection.



Use the appropriate product.



Follow the directions on the label



Have a written procedure for cleaning these areas



IMPLEMENT

Cleaning and disinfecting of hard surfaces and frequently touched surfaces with approved disinfectants

Frequency may need to be increased depending on surface and use.

- Pre-clean: Remove visible soil from surfaces
- Disinfect: if determined surface requires disinfection, use approved EPA List N product.
- Time: Consult label or contact Hydrite representative for the time necessary for disinfection. Surface must remain wet for time indicated for efficacy.
- Dry: Allow surface to air dry or wipe dry

Always follow directions on the label or consult your Hydrite representative to ensure safe and effective use of products.

Use proper PPE according to the label



IMPLEMENT

Documentation of actions

Procedure for additional cleaning activities should be written in advance of implementation

Forms should be generated including the following documentation:

- Date of activity
- Time of activity
- Location of activity
- Product used i.e. name of disinfectant
- Concentration of product i.e. ppm or ready to use (RTU)
- Time of contact in minutes, product must remain wet for this duration
- Initials of employee performing the activity



EXAMPLE FORM

Date	Time	Location	Disinfectant	Conc. ppm / RTU	Time of Contact (Min)	Initials
5/13/2020	1300	Chairs in cafeteria	Hydroxysan Plus	185 ppm	10 min	ABC

MAINTAIN AND REVISE



MAINTAIN AND REVISE



Continue routine cleaning and disinfection



Maintain safe practices



Continue practices that reduce potential exposure



MAINTAIN AND REVISE

Continue routine cleaning and disinfection

Normal routine cleaning with soap and water can reduce risk of exposure and is necessary before disinfection

Revise plan based on disinfectant and PPE availability.

Routinely disinfect frequently touched surfaces at minimum daily, but more frequent may be necessary

- Frequency depends on risk and/or priority
- Recommended every 2 hours; may be more or less frequent

Consider choosing a different disinfectant if first choice in short supply

- Consult your Hydrite representative for selection



MAINTAIN AND REVISE

Maintain safe practices

Frequent handwashing with soap and water for 20 seconds can reduce risk of transmission

- Hand sanitizers may be used when soap and water are not available
- Surface sanitizers and hand sanitizers may not be used interchangeably

CDC recommends face coverings as a protective measure in addition to social distancing in situations where social distancing is not possible or feasible

- Cloth face coverings are **NOT** an appropriate substitute for PPE where respirators or facemasks are recommended or required to protect the wearer.

Stay at home if sick

- If symptoms arise at work, separate from others and go home.

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html>



MAINTAIN AND REVISE

Continue practices that reduce potential contamination

Continue social distancing to the best of ability

- Staying six feet apart, if possible
- Maintain engineering controls such as plastic shields

Reduced sharing of common places and frequently touched surfaces

- Reduce porous material used for seating
- Remove frequently touched objects in common areas such as coffee creamers

Review and revise sanitation procedures as necessary

- Consult Hydrite representative for product selection help



DO NOT FORGET THE
BASICS



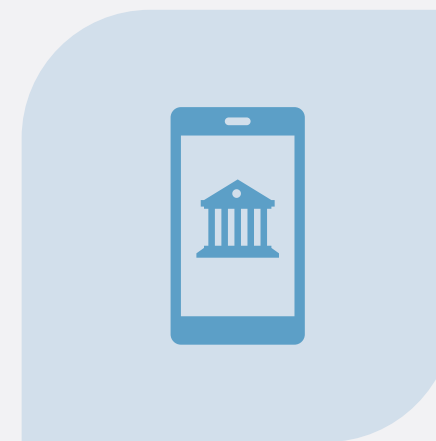
DON'T GET FORGET THE BASICS



DON'T FORGET THE ROUTINE
SANITATION AND GMPs



DON'T FORGET FOOD
SAFETY AND FOOD FRAUD



UNDERSTAND THE RISK TO
THE PEOPLE, FACILITY AND
CUSTOMER

**FOR MORE INFORMATION CONTACT
YOUR HYDRITE REPRESENTATIVE,
EMAIL FOODSAFETY@HYDRITE.COM
OR VISIT HYDRITE.COM**

